



Enhancing Professional Competence through Interpersonal Communication Skills among Pre-service Teachers

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Abstract

This study examines the relationship between interpersonal communication skills and professional competence among pre-service teachers. Employing a descriptive-survey research design, data were collected from 240 pre-service teachers enrolled in Bachelor of Education (B.Ed.) programmes across six accredited Teacher Education Institutes (TEIs) in Vadodara district, Gujarat, India, using a validated, researcher-constructed 25-item Likert-scale instrument. The instrument evaluated five interpersonal communication domains: verbal communication, active listening, nonverbal communication, empathy, and conflict resolution and feedback. Descriptive statistics, Pearson correlation analysis and multiple linear regression were used to analyse the data. Findings showed that all five interpersonal communication domains positively and significantly predicted professional competence, alongside empathy and emotional intelligence ($r = .301$) and active listening ($r = .247$), with active listening emerging as the strongest predictor. The overall model explained 71.3% of the variance in professional competence ($R^2 = .713$, $F(5, 234) = 159.43$, $p < .001$). Data highlight the imperative of embedding structured interpersonal communication training within the pre-service teacher education curricula. Practical recommendations for program designers, teacher educators, and decision-makers are provided.

Keywords: pre-service teachers, professional competence, interpersonal communication skills, active listening, empathy, verbal communication, survey research, teacher education

1. Introduction

Teaching is fundamentally a communicative profession. The classroom is, at its core, a social environment in which learning is constructed through dialogue, interaction, and relationship



(Vygotsky, 1978). The quality of teacher-student interaction, peer-to-peer communication and collegial discourse profoundly shapes not only academic results, but the socio-emotional dimensions of the school experience. It follows that professional competence in teaching—defined broadly as the capacity to perform the duties and responsibilities of the profession with skill, knowledge, and appropriate dispositions—is inextricably linked to the quality of one's interpersonal communication skills (Stronge, 2018).

Pre-service teachers, those undergoing initial preparation for the profession, enter teacher education programs with varying levels of interpersonal communication competence. Many have little formal training in the communication skills most critical for effective teaching: active listening, empathetic responding, constructive feedback delivery, conflict de-escalation, and the full range of verbal and nonverbal communication strategies that constitute expert pedagogical communication (Darling-Hammond et al., 2017). Without deliberate development of these competencies during pre-service preparation, beginning teachers are likely to encounter serious challenges in classroom management, student engagement, parent communication, and collegial collaboration.

Despite the well-established importance of interpersonal communication in teaching, it has historically received less systematic attention in teacher education than content knowledge and pedagogical methods (Nieto, 2017). The curricula of many teacher preparation programs devote limited time to explicit training in communication skills, and pre-service teachers rarely receive structured feedback on their communication practices during field experiences. The consequence of this gap is a generation of beginning teachers who enter classrooms technically prepared in their subject matter but insufficiently equipped in the interpersonal dimensions of professional practice.

This study addresses this gap by conducting a survey-based investigation of the relationship between interpersonal communication skills and professional competence among pre-service teachers. The study specifically intends to: (1) assess the level of interpersonal communication competence among pre-service teachers across five skill domains; (2) determine the relationship between each communication domain and self-reported professional competence; and (3) identify which communication domains are the strongest predictors of professional competence.



2. Review of Related Literature

2.1 Professional Competence in Teaching:

Professional competence in teaching encompasses a multidimensional set of knowledge, skills, and dispositions that enable a teacher to act effectively in the complex, ever-changing classroom environment (Shulman, 1987). Scholars have proposed diverse frameworks for conceptualising teaching competence. Shulman's knowledge-based framework (1987) identifies content knowledge, pedagogical content knowledge and curricular knowledge as basic. The OECD (2019) Teacher Competency Framework emphasizes the knowledge of students, instructional practices, professional engagement and ongoing learning as core dimensions. Danielson's (2013) Framework for Teaching adds communication and instructional delivery as the central pillars of professional effectiveness.

Common across these frameworks is an explicit or implicit recognition that communication skills are foundational to professional competence. A teacher who possesses deep content knowledge but cannot communicate it clearly, who understands learning theory but cannot build productive relationships with students, or who has sophisticated assessment knowledge but cannot provide feedback constructively, will invariably fall short of professional effectiveness. Communication, then, is not peripheral to professional competence but constitutive of it.

2.2 Interpersonal Communication Skills in Teaching

Interpersonal communication in the teaching context refers to dyadic and small-group communication among teachers and students, among students, and between teachers and professional colleagues (Watzlawick et al., 1967). It encompasses verbal communication—the content and organization of spoken language—and nonverbal communication, including gestures, facial expressions, tone of voice, and use of physical space. It also includes higher-order communicative competencies, such as active listening, empathetic responding, and conflict management.

A growing body of research has established positive associations between teachers' interpersonal communication competence and a range of professional outcomes. McCroskey and Richmond (1992) found that teacher communicator style significantly



predicted student motivation, affect toward learning, and academic achievement. More recently, Pianta et al. (2012) demonstrated that the quality of teacher–student interaction—conceptualized largely in communicative terms—was the strongest predictor of student learning gains in elementary school classrooms. Cornelius-White's (2007) meta-analysis of 119 studies confirmed that person-centered teacher–student relationships, characterised by empathetic, non-directive, and authentic communication, were robustly associated with student achievement, motivation, and positive classroom climate.

2.3 Empathy in Professional Practice

Empathy—the capacity to perceive and respond to the emotional states and perspectives of others—has been identified as a pivotal dimension of effective teaching communication (Rogers, 1969). Goleman's (1995) conceptualisation of emotional intelligence (EI) extended this insight, arguing that the ability to recognise, understand, and manage one's own emotions and those of others is a core professional competency in high-interpersonal-demand professions such as teaching. Brackett et al. (2011) found that teachers with higher emotional intelligence created more positive and productive classroom climates, engaged in more responsive instructional communication, and reported greater job satisfaction than their lower-EI counterparts.

For pre-service teachers, developing emotional intelligence and sensitive communication is particularly important. Research by Hargreaves (2000) brought out the emotional labour involved in teaching—the sustained effort to manage emotional expression in the service of professional relationships—and argued that teacher education programs that neglect the development of emotional competence leave pre-service teachers inadequately prepared for the affective demands of the profession.

2.4 Active Listening as a Professional Competency

Active listening—characterized by sustained attention, comprehension, interpretation, and responsive feedback—is one of the most frequently cited but least systematically developed interpersonal communication skills in teacher education (Brownell, 2012). In the classroom, active listening enables teachers to accurately assess students' understanding, identify sources of confusion, and respond in ways calibrated to



individual students' needs. In professional and collegial contexts, active listening facilitates collaborative problem-solving, reduces misunderstanding, and builds trust. Survey-based research on teacher communication competence consistently finds that pre-service teachers rate active listening as highly important and insufficiently developed in their preparation programs (Sparks-Langer & Colton, 1991; Zeichner, 2010). This gap between perceived importance and actual competence development illustrates the requirement of structured active listening training as a component of the pre-service teacher preparation.

2.5 Gaps in the Literature

While the theoretical and empirical literature strongly supports the importance of interpersonal communication skills for professional teaching competence, the survey-based empirical literature examining this relationship specifically among pre-service teachers in developing-country contexts is relatively sparse. Most existing studies have been conducted in Western settings, with limited attention to specific communication competencies that predict professional competence across multiple domains within diverse educational contexts. The present study addresses this gap by conducting a systematic, instrument-based survey investigation of this relationship among pre-service teachers enrolled in Teacher Education Institutes (TEIs) in Vadodra district, Gujarat, India—a geographically and institutionally specific context that remains significantly underrepresented in the national and international teacher education research literature.

3. Methodology

3.1 Research Design

This study employs a descriptive-correlational survey research design. Survey research is appropriate when the goal is to gather systematic, quantitative data from a defined population on a set of variables and to examine relationships among those variables (Creswell & Creswell, 2018). The descriptive dimension of the design allows characterization of levels of interpersonal and professional competence among pre-service teachers, while the correlational dimension permits examination of the



associations and predictive relationships between communication domains and professional competence outcomes.

3.2 Population and Sample

The target population comprised pre-service teachers enrolled in Bachelor of Education (B.Ed.) programmes across six accredited Teacher Education Institutes (TEIs) in Vadodara district, Gujarat, India, recognized by the National Council for Teacher Education (NCTE). Vadodara district was purposively selected as the study locale on account of its significant concentration of recognized B.Ed. institutions, its linguistic and cultural diversity reflecting the broader socio-educational conditions of urban and semi-urban Gujarat, and its strategic centrality within the state's teacher education infrastructure. The six participating institutes included both government-aided and self-financed B.Ed. colleges, ensuring representation of the full institutional range of teacher education provision in the district. A stratified random sampling procedure was used to ensure proportional representation across institutions, year levels (Year 1 and Year 2 of the two-year B.Ed. programme), gender, and medium of instruction (Gujarati and English). Of the approximately 1,500 pre-service teachers enrolled across the six participating institutes during the academic year 2024–2025, a final sample of 240 pre-service teachers was drawn (Female = 161, 67.1%; Male = 79, 32.9%), with a mean age of 22.4 years (SD = 1.7). The sample size was determined using Krejcie and Morgan's (1970) sample size table, which specifies a minimum sample of 306 for a population of approximately 1,500; however, given the targeted and bounded character of the Vadodara district study population and the researcher's aim of achieving saturation across institutional and demographic strata, a pragmatic sample of 240 was drawn in consultation with institutional research advisors and determined to be adequate for the planned descriptive and correlational analyses. Participation was fully voluntary, and all participants were informed of the research purpose, the privacy of their responses, and their unconditional right to withdraw at any time without consequences to their academic standing.



3.3 Research Instrument

Data were collected using the Interpersonal Communication Skills and Professional Competence Scale (ICSPCS), a 25-item, researcher-constructed instrument organised into five subscales corresponding to the five communication domains identified in the literature review. Each item was rated on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A single global professional competence subscale comprising 10 additional items assessed respondents' self-perceived overall professional competence (e.g., lesson planning, instructional delivery, classroom management, assessment, and professional conduct). The full instrument thus comprised 35 items, with the 25-item ICSPCS predicting the 10-item professional competence scale.

The instrument was developed through a systematic process involving: (1) review of existing scales and frameworks within the intercultural communication and teacher competence literature; (2) expert panel review by five specialists in teacher education and communication studies; (3) linguistic review for clarity plus appropriateness; and (4) pilot testing with 40 pre-service teachers not included in the main sample. Items with item-to-total correlations below .30 were revised or removed following pilot testing.

3.4 Validity and Reliability

Content validity was established through the expert panel review process, with a Content Validity Index (CVI) of .91 achieved across all items. Construct validity was confirmed through an exploratory factor analysis (EFA) conducted on pilot data, which yielded a five-factor solution consistent with the instrument's theoretical structure, with factor loadings ranging from .52 to .81. Internal consistency reliability was assessed using Cronbach's alpha. As reported in Table 1, all subscales demonstrated good to excellent internal consistency ($\alpha = .819-.924$), exceeding the commonly accepted threshold of .70 (Nunnally & Bernstein, 1994).



Table 1

Internal Consistency Reliability of the ICSPCS Subscales (N = 40, Pilot Sample)

Verbal Communication	5	0.847	Good
Active Listening	5	0.861	Good
Nonverbal Communication	5	0.819	Good
Empathy	5	0.883	Good
Conflict Resolution & Feedback	5	0.856	Good
Overall Scale	25	0.924	Excellent

Note. SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree.

Cronbach's alpha interpretation: $\alpha \geq .90$ = Excellent; $.80-.89$ = Good; $.70-.79$ = Acceptable.

3.5 Data Collection Procedure

Institutional ethics approval was obtained prior to data collection. Informed consent was obtained from all participants, who were assured that their participation was voluntary and that their responses would be kept confidential. Questionnaires were administered in paper-and-pencil format during regularly scheduled class sessions, with research assistants present to clarify procedural questions. Completed questionnaires were collected immediately following administration. The overall response rate was 97.6% (320 of 328 distributed questionnaires were returned; 8 were excluded due to incomplete responses). (Pandey, 2023)

3.6 Data Analysis

Quantitative data were analyzed using IBM SPSS Statistics Version 27. Descriptive statistics (means and standard deviations) were computed for each subscale to characterise the levels of interpersonal and professional competence across the sample. The following scale was used for interpreting mean scores: 4.50–5.00 = Very High; 3.50–4.49 = High; 2.50–3.49 = Moderate; 1.50–2.49 = Low; 1.00–1.49 = Very Low. Pearson product-moment correlation coefficients were computed to assess the bivariate relationships between each communication domain and professional competence, with a significance threshold of $p < .05$. Multiple linear regression analysis was conducted



to identify the unique predictive contributions of each communication domain to professional competence, with multicollinearity diagnostics (VIF and tolerance values) computed to verify the assumptions of the regression model.

4. Survey Instrument

The following table presents the complete 25-item Interpersonal Communication Skills and Professional Competence Scale (ICSPCS). Respondents are asked to indicate the degree to which each statement reflects their current competence or practice using the five-point Likert scale: SA = Strongly Agree (5), A = Agree (4), N = Neutral (3), D = Disagree (2), SD = Strongly Disagree (1).

Table 2

Interpersonal Communication Skills and Professional Competence Scale (ICSPCS) — 25-Item Survey Instrument

Verbal Communication	1	I can clearly articulate my instructional goals and objectives to students.
	2	I adjust my language and vocabulary based on the comprehension level of my students.
	3	I use precise and unambiguous language when giving directions or feedback.
	4	I effectively explain complex concepts using examples and analogies.
	5	I can engage students in meaningful academic dialogue during lessons.
Active Listening	6	I listen attentively to students without interrupting them.
	7	I ask follow-up questions to ensure I understand students' responses.
	8	I paraphrase or summarize student responses to confirm understanding.
	9	I give full attention to speakers during meetings and peer discussions.
	10	I acknowledge and validate the concerns raised by students or colleagues.
Nonverbal Communication	11	I use appropriate eye contact to establish rapport with students.



	12	My body language conveys openness, confidence, and approachability.
	13	I use gestures and facial expressions to reinforce verbal messages.
	14	I am aware of how my tone of voice influences student engagement.
	15	I use physical proximity effectively to manage classroom dynamics.
Empathy	16	I can recognize and respond appropriately to students' emotional states.
	17	I demonstrate patience and sensitivity when students face difficulties.
	18	I create a safe and supportive environment where students feel heard.
	19	I manage my own emotions professionally in challenging classroom situations.
	20	I consider the cultural and personal backgrounds of students in my communication.
Conflict Resolution & Feedback	21	I handle classroom conflicts calmly and constructively.
	22	I provide specific, timely, and constructive feedback to students.
	23	I accept critical feedback from supervisors and peers without defensiveness.
	24	I negotiate solutions collaboratively when disagreements arise.
	25	I use communication strategies that de-escalate tensions in the classroom.

Note. SA = Strongly Agree (5); A = Agree (4); N = Neutral (3); D = Disagree (2); SD = Strongly Disagree (1). Shaded rows represent distinct communication domains. Respondents rate each item based on their self-perceived competence or typical practice.

5. Results

5.1 Descriptive Statistics: Level of Interpersonal Communication Competence

Table 3 presents the mean scores and standard deviations for each interpersonal communication domain and the overall professional competence scale. Pre-service teachers reported high levels of competence on four of the five communication domains, with means ranging from



3.58 to 4.01. Empathy and Emotional Intelligence received the highest mean rating ($M = 4.01$, $SD = 0.63$), indicating that pre-service teachers perceived themselves as most competent in recognising and responding to the emotional dimensions of teaching interactions. Active listening received the second-highest rating ($M = 3.94$, $SD = 0.68$), followed by Verbal Communication ($M = 3.82$, $SD = 0.71$) and Nonverbal Communication ($M = 3.67$, $SD = 0.79$). Conflict Resolution and Feedback received the lowest mean rating ($M = 3.58$, $SD = 0.84$), though this score still falls within the "High" interpretation band. The overall professional competence mean of 3.80 ($SD = 0.65$) indicates a generally high level of self-perceived professional competence across the sample. (Alluru & Suneela, 2023)

Table 3

Descriptive Statistics for Interpersonal Communication Domains and Professional Competence (N = 320)

Verbal Communication	3.82	0.71	High
Active Listening	3.94	0.68	High
Nonverbal Communication	3.67	0.79	Moderate-High
Empathy	4.01	0.63	High
Conflict Resolution & Feedback	3.58	0.84	Moderate-High
Overall Professional Competence	3.80	0.65	High

Note. Scale: 4.50–5.00 = Very High; 3.50–4.49 = High; 2.50–3.49 = Moderate. SD = Standard Deviation.

5.2 Correlation Analysis

Table 4 presents the Pearson correlation matrix for all five interpersonal communication domains and the professional competence composite score. All correlation coefficients were positive and statistically significant at the $p < .01$ level, confirming the hypothesized positive relationships between each communication domain and professional competence. Professional competence demonstrated its strongest correlation with Empathy ($r = .782$, $p < .01$), followed by Active Listening ($r = .748$, $p < .01$), Verbal Communication ($r = .721$, $p < .01$), Conflict



Resolution and Feedback ($r = .694, p < .01$), and Nonverbal Communication ($r = .663, p < .01$). Moderate to strong inter-correlations among the communication domain subscales ($r = .501$ to $.703$) suggest that the domains are related but conceptually distinct constructs, supporting the multidimensional structure of the ICSPCS instrument. (Alluru & Suneela, 2023)

Table 4
Pearson Correlation Matrix: Interpersonal Communication Domains and Professional Competence
($N = 320$)

1. Verbal Comm.	1.00	—	—	—	—	—
2. Active Listening	.612**	1.00	—	—	—	—
3. Nonverbal Comm.	.538**	.591**	1.00	—	—	—
4. Empathy	.649**	.703**	.556**	1.00	—	—
5. Conflict Res.	.501**	.587**	.524**	.618**	1.00	—
6. Professional Competence	.721**	.748**	.663**	.782**	.694**	1.00

Note. ** $p < .01$ (two-tailed). Values are Pearson r coefficients. Dashes (—) indicate cells not computed (upper triangle omitted for clarity).

5.3 Multiple Regression Analysis

A multiple linear regression analysis was conducted with professional competence as the criterion variable and the five interpersonal communication domains as predictor variables. Prior to analysis, multicollinearity diagnostics confirmed that tolerance values (.41–.67) and Variance Inflation Factor (VIF) values (1.49–2.44) were within permissible limits (Hair et al., 2019), indicating no problematic multicollinearity among the predictors. The overall regression model was statistically significant, $F(5, 234) = 159.43, p < .001$, and explained 71.3% of the variance in professional competence ($R^2 = .713, \text{Adjusted } R^2 = .707$). (Interpersonal Communication Competence Among Nursing Students, 2019) Table 5 presents the standardized and unstandardized regression coefficients for each predictor.



Table 5

Multiple Regression Analysis: Interpersonal Communication Domains Predicting Professional Competence (N = 320)

(Constant)	0.412	0.183	—	2.251	.025
Verbal Communication	0.187	0.062	.192	3.016	.003**
Active Listening	0.231	0.058	.247	3.983	.000**
Nonverbal Communication	0.143	0.065	.148	2.200	.029*
Empathy	0.289	0.061	.301	4.738	.000**
Conflict Resolution & Feedback	0.176	0.063	.183	2.794	.006**

Note. B = Unstandardized coefficient; SE B = Standard Error; β = Standardized coefficient.

$R^2 = .713$; Adjusted $R^2 = .707$; $F(5, 234) = 159.43$, $p < .001$. * $p < .05$; ** $p < .01$.

All five communication domains made statistically significant, unique contributions to the prediction of professional competence. Empathy was the strongest predictor ($\beta = .301$, $p < .001$), followed by Active Listening ($\beta = .247$, $p < .001$), Verbal Communication ($\beta = .192$, $p = .003$), Conflict Resolution and Feedback ($\beta = .183$, $p = .006$), and Nonverbal Communication ($\beta = .148$, $p = .029$). (Fuller et al., 2023) These findings suggest that while all five communication domains contribute uniquely to professional competence, the affective and relational dimensions of interpersonal communication—empathy and active listening—are especially critical for pre-service teachers' professional development.

6. Discussion

The findings of this study provide robust empirical support for the relationship between interpersonal communication skills and professional competence among pre-service teachers, extending and refining the theoretical arguments advanced in the literature review. The most notable finding—that empathy was the strongest predictor of professional competence—aligns with Goleman's (1995) theoretical frameworks and Brackett et al.'s (2011) empirical findings, underscoring the centrality of affective competence in professional teaching practice.



The finding that active listening was the second-strongest predictor is consistent with Brownell's (2012) assertion that listening competence is foundational to effective professional communication, and with survey-based research identifying active listening as a critical but underdeveloped competency in pre-service teacher preparation. That active listening outperformed verbal communication as a predictor of professional competence is noteworthy, suggesting that the capacity to receive and process communication may be more professionally consequential than the capacity to transmit it—a finding with implications for how communication skills are prioritized and taught in teacher education programs.

The finding that nonverbal communication, while a significant predictor, contributed the smallest unique variance to professional competence is also worth noting. This may reflect the greater difficulty of self-assessing nonverbal behaviour relative to other communication dimensions, the more implicit nature of nonverbal learning, or genuine differences in the relative contribution of nonverbal skills to professional outcomes as conceptualized by respondents. Future research employing observer-rated nonverbal communication measures, rather than self-report, would help clarify this finding.

The substantial proportion of variance explained by the regression model ($R^2 = .713$) suggests that the five interpersonal communication domains collectively account for the majority of variance in pre-service teachers' self-perceived professional competence. (Shilpa & Rekha, 2024) While common-method variance—a potential limitation of single-source, self-report survey designs—may inflate this estimate, the magnitude of the relationship is consistent with theoretical expectations and with correlational research in adjacent areas. The use of observer-rated professional competence as a criterion in future studies would provide a more stringent test of these relationships.

7. Recommendations

7.1 For Teacher Education Programs

Teacher education programs should integrate structured interpersonal communication training across the full span of the pre-service curriculum rather than treating communication development as an ancillary concern. Given the particularly strong predictive relationship between empathy and professional competence identified in this study, programs should invest in evidence-based empathy development activities—



including perspective-taking exercises, cross-cultural dialogue simulations, and emotional regulation training—as core components of the pre-service preparation sequence. Active listening training, including structured practice in paraphrasing, reflective questioning, and listening observation, should similarly be embedded in methods courses, field seminars, and collaborative learning activities throughout the program.

7.2 For Teacher Educators and Cooperating Teachers

Teacher educators should explicitly model and make visible their own interpersonal communication practices, providing pre-service teachers with both a professional standard and a metacognitive framework for understanding effective communicative behavior. Cooperating teachers who supervise field experiences should receive training in providing structured feedback on pre-service teachers' interpersonal communication, moving beyond generic assessments of classroom management and lesson delivery to specific observations of communication quality. Video-based self-assessment tools, in which pre-service teachers review recordings of their own teaching interactions, offer a particularly powerful means of developing communication self-awareness.

7.3 For Policy Makers and Accreditation Bodies

Accreditation standards for teacher education programs should include explicit requirements for interpersonal communication competence as a demonstrated program outcome, with performance indicators that span verbal communication, active listening, nonverbal communication, empathetic engagement, and conflict resolution. Licensure and certification assessments for beginning teachers should incorporate structured evaluation of interpersonal communication skills, treating communication competence as a professional requirement rather than a desirable personal attribute. National professional development frameworks should identify ongoing development of interpersonal communication skills as a career-long professional obligation for all teachers.

8. Conclusion

This survey-based study has provided systematic empirical evidence that interpersonal communication skills are significant and substantial predictors of professional competence



among pre-service teachers. Across five communication domains—verbal communication, active listening, nonverbal communication, empathy and conflict resolution and feedback—positive and significant relationships with professional competence were found, with the five domains collectively explaining 71.3% of variance in professional competence. Empathy and active listening emerged as particularly powerful predictors, pointing to the centrality of affective and relational communicative competencies in professional teaching effectiveness. These findings have clear implications for how teacher education programs design and deliver pre-service preparation. Communication skill development must move from the margins to the center of the curriculum, with structured learning experiences, deliberate practice opportunities, and systematic assessment of interpersonal communication competence integrated throughout the preparation program. Teacher educators, cooperating teachers, and policymakers all have roles to play in creating the conditions under which pre-service teachers can develop the communication competencies that are essential to professional excellence. The field of teacher education stands to benefit greatly from continued investment in survey-based and experimental research examining the mechanisms, moderators, and long-term professional consequences of the development of interpersonal communication skills among pre-service teachers.

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